**Module :2 (css and css3)**

**1.What are the benefits of using CSS?**

* Faster page speed.More code means slower page speed.
* Better user Experience.CSS not only makes web pages easy on the eye,it also allows for user friendly formatting.
* Quicker Developement time.
* Easy formating changes.
* Compatibility Across Devices.

**2. What are the disadvantages of CSS?**

* **Css**,css1 up to css3,result in creating of confusion Web browsers.
* With css, what works with one browser might not always work with another.The web developers need to test for compatibility,running the program across multiple browsers.
* The programming langauge world is complicated for non-developers and beginners.Different levels of css.
* Browser compatibility (some styles sheet are supported and some are not.)
* CSS works differently on different browsers.IE and Opera supports CSS as different logic.
* There are multiple levels which creates confusion for non-developers and beginners.

**3. What is the difference between CSS2 and CSS3?**

* The biggest different between CSS2 and CSS3 is that CSS3 is now split into different modules.since each modules makes its way through the W3C individually,there’s a wider range of browser support . Make sure you test your CSS3 pages in as many browsers and operating systems as possible to ensure compatibility.
* Multiple backgrounds
* Background-image , Background-position and Background-repeat can now be used to specify multiple Background images to be layered on top of one another.The first image is closest to the user, with the following image layered behind.If there is a Background color,it’s painted below all the image layers.

**4.** **Name a few CSS style components**

* Selecter: HTML element name ,id name ,class name .
* Property: it’s like an attribute such as background color,font-size,position,text-align,color,border etc..
* Values : Which defines property or values allocate for properties.

**5. What do you understand by CSS opacity?**

* The Opacity CSS property sets the opacity of an element.Opacity is the degree to which content behind an element is hidden ,and is the opposite of transparency.
* Example:
* Div

{

Opacity:0.5;

}

**6. How can the background color of an element be changed?**

To add background color in HTML, use the CSS background-color property.

Example: <!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <style>

//css start//

        body {

            background-color: aqua;

        }

    </style>

</head>

<body>

</body>

</html>

**7. How can image repetition of the backup be controlled?**

This task can be achived by using the background-repeat property that will halp us to control the repetation of the image .The background –repeat property in css is used to repeat the background image both horizontally and vertically.is also decides whether the background image will be repeated or not.

Example: <!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <style>

//css start//

        body {

            margin-top: 40px;

            background-image: url("https://media.geeksforgeeks.org/wp-content/uploads/geeks-25.png");

            background-repeat: repeat-x;

            background-size: 200px 150px;

        }

    </style>

</head>

<body>

    <h1>background repeat property</h1>

</body>

</html>

**8. What is the use of the background-position property?**

The background-position property sets the starting position of a background image.by default,a background image is placed at the top-left corner of an element ,and repeated both verticallyand horizontally.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <style>

//css start//

        body {

            background-image: url();

            background-repeat: no-repeat;

            background-attachment: fixed;

            background-position: center;

        }

    </style>

</head>

<body>

//html start//

    <h1>background position property</h1>

    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Unde, placeat obcaecati! Facilis perferendis cum aspernatur at praesentium repellendus magnam reiciendis aut porro! Recusandae voluptatibus laudantium ipsa ab porro quos inventore.</p>

</body>

</html>

**9. Which property controls the image scroll in the background?**

The background-attachment property sets whether a background image scrolls with the rest of the page,or is fixed.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <style>

//css start//

//back ground image property//

        body {

            background-image: url();

            background-repeat: no-repeat;

            background-attachment: fixed;

        }

    </style>

</head>

<body>

//html start//

    <h1>background position property</h1>

    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Unde, placeat obcaecati! Facilis perferendis cum aspernatur at praesentium repellendus magnam reiciendis aut porro! Recusandae voluptatibus laudantium ipsa ab porro quos inventore.</p>

    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Repellat nam, impedit fugiat adipisci assumenda eius dolorem aperiam doloremque, quod nesciunt, minus eveniet. Vel impedit maxime velit illum harum, dignissimos voluptatem.</p>

</body>

</html>

**10. Why should background and color be used as separate properties?**

It enhance the legibility of style sheets.the background property is complex property in css,and if it is combined with color.the complexity will further increase.

The background color propery in css is very commonly used and contains amny varients.

**11. How to center block elements using CSS1?**

To horizontally center a block element (like <div>),use margin:auto;setting the width of the element will prevent it from stretching out to the edges of its container.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <style>

//center block element

//css start//

        .center {

            margin: auto;

            width: 60%;

            border: 3px solid #73ad21;

            padding: 10px;

        }

    </style>

</head>

<body>

//h1 start

    <h1>center align element</h1>

//p start//

    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Unde, placeat obcaecati! Facilis perferendis cum aspernatur at praesentium repellendus magnam reiciendis aut porro! Recusandae voluptatibus laudantium ipsa ab porro quos inventore.</p>

    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Repellat nam, impedit fugiat adipisci assumenda eius dolorem aperiam doloremque, quod nesciunt, minus eveniet. Vel impedit maxime velit illum harum, dignissimos voluptatem.</p>

div start

    <div class="center">

        <p>Hello World..</p>

    </div>

</body>

</html>

**12. How to maintain the CSS specifications?**

* The syntax and data types of the language.
* Details explanation on css selectors.
* How you can assign value to properties.
* The cascade(the”c” in CSS)
* How inheritance works.
* The box model etc..

**13. What are the ways to integrate CSS as a web page?**

* Inline CSS
* Internal CSS
* External CSS
* inline css
* Inline CSS applied directly to HTML element,using the style attribute.
* example:<h1 style="color: green; font-size: 10px;">hello world.</h1>
* 3.internal css
* Internal CSS is defined with in the head section of HTML document, using the style tag.
* Example
* <head>
* <title>Internal CSS </title>
* <style>
* p {
* color: blue;
* font-size: 18px;
* }
* </style>
* </head>
* <body>
* <p>hello world></p>
* </body>
* 3.external css
* External CSS is a separate style in HTML document using the link tag.
* Example
* <head>
* <title>External CSS Example</title>
* <link rel="stylesheet" type="text/css" href="style.css">
* </head>
* <body>
* <h2>hiiiiii</h2>
* </body>

**14. What is embedded style sheets?**

It allows you to defines styles for a particular HTML document as a whole in one place.This is done by Embadding the <style></style>tags containing the css properties in the head of your document.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <!--embeded stylesheet-->

    <style>

    </style>

</head>

<body>

//html start//

    <h1>center align element</h1>

    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Unde, placeat obcaecati! Facilis perferendis cum aspernatur at praesentium repellendus magnam reiciendis aut porro! Recusandae voluptatibus laudantium ipsa ab porro quos inventore.</p>

    <p>Lorem ipsum dolor, sit amet consectetur adipisicing elit. Repellat nam, impedit fugiat adipisci assumenda eius dolorem aperiam doloremque, quod nesciunt, minus eveniet. Vel impedit maxime velit illum harum, dignissimos voluptatem.</p>

    <div class="center">

        <p>Hello World..</p>

    </div>

</body>

</html>

**15. What are the external style sheets?**

An External stylesheet is a separate CSS file that can be accessed by creating a link within the head section of the web page.Multiple webpages can use the same link to access the stylesheet is placed within the head section of the page.

**16. What are the advantages and disadvantages of using external style sheets?**

Advantages:

* With the help of External stylesheets,the styels of numberous document can be organized from one single file
* In external stylesheets,Classes can be made for use on numberous HTML element types in many form of the sites.
* In complex contexts,Methods like Selector and grouping can be implemented to apply stylesheet.

Disadvantages:

* An extra download is essential to import style information for each file.
* The execution of the file maybe deferred till the external stylesheet is loaded.
* While implementing stylesheets,we need to test web pages with multiple browsers in order to check compatibility issues.

**17. What is the meaning of the CSS selector?**

It is a pattern of elements and other terms that tell the browser which HTML elements should be selected to have the css property values inside the rules applied to them.

1. Element Selector: Selects elements based on their tag name. For example, p selects all <p> elements.
2. Class Selector: Selects elements with a specific class attribute. It is denoted by a dot (.) followed by the class name. For example, .my-class selects all elements with the class name "my-class".
3. ID Selector: Selects a single element with a specific ID attribute. It is denoted by a hash (#) followed by the ID name. For example, #my-id selects the element with the ID "my-id".

**18. What are the media types allowed by CSS?**

Media can be classified in to four types.

* Print media (newspapares,Magazines)
* Broadcast media (tv,radio)
* Outdoor or out of home(OHH)
* Media internet

**19. What is the rule set?**

A table of Instruction used by a controlled interface to determine what data is allowable and how the data is handles between Interconnected systems.

**20. Create Layouts.**

**Html page:**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

//masin div start

    <div class="main">

//sub //

        <div class="submain1">

            <div class="X">

                <div class="x-1">

                    <h1>Thumbnail</h1>

                </div>

                Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero recusandae quibusdam consequatur perferendis illum dignissimos blanditiis debitis cupiditate officia sapiente. Doloribus nulla voluptatum soluta et iure quisquam itaque ratione? Pariatur.

                <br><br> <button>View</button>

                <button>Edit</button>

            </div>

            <div class="Y">

                <div class="x-2">

                    <h1>Thumbnail</h1>

                </div>

                Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero recusandae quibusdam consequatur perferendis illum dignissimos blanditiis debitis cupiditate officia sapiente. Doloribus nulla voluptatum soluta et iure quisquam itaque ratione? Pariatur.

                <br><br> <button>View</button>

                <button>Edit</button>

            </div>

//div 2 start//

            <div class="Z">

                <div class="x-3">

                    <h1>Thumbnail</h1>

                </div>

                Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero recusandae quibusdam consequatur perferendis illum dignissimos blanditiis debitis cupiditate officia sapiente. Doloribus nulla voluptatum soluta et iure quisquam itaque ratione? Pariatur.

                <br><br> <button>View</button>

                <button>Edit</button>

            </div>

        </div>

//submain2 start//

        <div class="submain2">

            <div class="A">

                <div class="a-1">

                    <h1>Thumbnail</h1>

                </div>

                Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero recusandae quibusdam consequatur perferendis illum dignissimos blanditiis debitis cupiditate officia sapiente. Doloribus nulla voluptatum soluta et iure quisquam itaque ratione? Pariatur.

                <br><br> <button>View</button>

                <button>Edit</button>

            </div>

b start//

            <div class="B">

                <div class="a-2">

                    <h1>Thumbnail</h1>

                </div>

                Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero recusandae quibusdam consequatur perferendis illum dignissimos blanditiis debitis cupiditate officia sapiente. Doloribus nulla voluptatum soluta et iure quisquam itaque ratione? Pariatur.

                <br><br> <button>View</button>

                <button>Edit</button>

            </div>

//c start//

            <div class="C">

//class a3start//

                <div class="a-3">

                    <h1>Thumbnail</h1>

                </div>

                Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero recusandae quibusdam consequatur perferendis illum dignissimos blanditiis debitis cupiditate officia sapiente. Doloribus nulla voluptatum soluta et iure quisquam itaque ratione? Pariatur.

                <br><br> <button>View</button>

                <button>Edit</button>

            </div>

        </div>

    </div>

</body>

</html>

**Style.css page:**

\* {

    margin: 0;

    padding: 0;

    box-sizing: border-box;

}

//main start//

.main {

    height: 500px;

    width: 100%;

    background-color: aqua;

}

.submain1 {

    height: 200px;

    width: 100%;

    display: flex;

}

.X {

    height: 200px;

    width: 25%;

    margin-top: 2%;

    margin-left: 5%;

    border: 2px solid black;

    font-size: 10px;

}

.X .x-1 {

    height: 100px;

    width: 100%;

    background-color: gray;

}

.x-1 h1 {

    color: white;

    font-size: 20px;

    display: flex;

}

.Y {

    height: 200px;

    width: 25%;

    margin-top: 2%;

    margin-left: 5%;

    border: 2px solid black;

    font-size: 10px;

}

.Y .x-2 {

    height: 100px;

    width: 100%;

    background-color: gray;

}

.x-2 h1 {

    color: white;

    font-size: 20px;

}

.Z {

    height: 200px;

    width: 25%;

    margin-top: 2%;

    margin-left: 5%;

    border: 2px solid black;

    font-size: 10px;

}

.Z .x-3 {

    height: 100px;

    width: 100%;

    background-color: gray;

}

.x-3 h1 {

    color: white;

    font-size: 20px;

}

.submain2 {

    height: 200px;

    width: 100%;

    display: flex;

}

.A {

    height: 200px;

    width: 25%;

    margin-top: 5%;

    margin-left: 5%;

    border: 2px solid black;

    font-size: 10px;

}

.A .a-1 {

    height: 100px;

    width: 100%;

    background-color: gray;

}

.a-1 h1 {

    color: white;

    font-size: 20px;

}

.B {

    height: 200px;

    width: 25%;

    margin-top: 5%;

    margin-left: 5%;

    border: 2px solid black;

    font-size: 10px;

}

.B .a-2 {

    height: 100px;

    width: 100%;

    background-color: gray;

}

.a-2 h1 {

    color: white;

    font-size: 20px;

}

.C {

    height: 200px;

    width: 25%;

    margin-top: 5%;

    margin-left: 5%;

    border: 2px solid black;

    font-size: 10px;

}

.C .a-3 {

    height: 100px;

    width: 100%;

    background-color: gray;

}

.a-3 h1 {

    color: white;

    font-size: 20px;

}

**Output:**

